AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT					CODE	PAGE OF PAGES		
AMENDMENT OF SOLICITA	TION/MODIF	ICATION OF CONTRACT		J		1 5		
2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.			5. PROJEC	TNO.(Ifapplicable)		
0002	16-Mar-2009	W81G6681921670						
6. ISSUED BY CODE	W912P6	7. ADMINISTERED BY (If other than item 6)		CODI	3			
U. S. ARMY ENGINEER DISTRICT, CHICAGO 111 NORTH CANAL STREET SUITE 600 CHICAGO IL 60606-7206		See Item 6						
8. NAME AND ADDRESS OF CONTRACTOR (X	9A. AMENDMENT OF SOLICITATION NO.						
			Х	9B. DATED (SEE ITEM 11) 17-Feb-2009				
				10A. MOD. OF CONTRACT/ORDER NO.				
CODE FACILITY CODE					10B. DATED (SEE ITEM 13)			
		PPLIES TO AMENDMENTS OF SOLIC	CIT	ATIONS				
X The above numbered solicitation is amended as set forth	in Item 14. The hour and o	late specified for receipt of Offer		is extended, X	is not ext	ended.		
Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning								
	(11 10quires)							
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.								
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.								
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).								
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:								
D. OTHER (Specify type of modification and authority)								
E. IMPORTANT: Contractor is not, is required to sign this document and return copies to the issuing office.								
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)								
SUBJECT: INVITATION FOR BIDS NO. W912P6-09-B-0002, LITTLE CALUMET RIVER, INDIANA, LOCAL FLOOD PROTECTION, STAGE VII, MUNSTER AND HAMMOND, INDIANA								
The government is issuing this Amendment Number 0002 to its previously issued Solicitation W912P6-09-B-0002 for the purpose of amending various areas of the Solicitation package as delineated on the following pages of this Amendment.								
THIS AMENDMENT CONTINUES ON THE FOLLOWING PAGES								
Except as provided herein, all terms and conditions of the do	cument referenced in Item 9	A or 10A, as heretofore changed, remains unchar	nged	and in full force and e	ffect.			
15A. NAME AND TITLE OF SIGNER (Type or print) 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)				e or print)				
		TEL:		EMAIL:				
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNEI	16B. UNITED STATES OF AMEI	RIC.	A	10	6C. DATE SIGNED		
(Signature of parson authorized to sign)		BY (Signature of Contracting Of	fice	r)		16-Mar-2009		
(Signature of person authorized to sign)	1	(Signature of Contracting Of	iice	1)				

SUMMARY OF CHANGES

A. BID OPENING DATE:

The bid opening date is NOT EXTENDED by this Amendment; therefore, the bids are due by 2:00 p.m. CDT on March 24, 2009. Detailed information regarding the submission of bids is located in Block No. 13 on Page 1 of the Solicitation document (SF 1442).

B. AMENDED SOLICITATION SECTIONS:

(1) SECTION 00700 (CONTRACT CLAUSES): FAR Clause 52.211-12 has been modified to revise Paragraph (a) of said Clause. In that respect, the following modified Clause replaces the "Liquidated Damages – Construction" Clause that was contained in the original Solicitation, as issued on 17 February 2009; THE MODIFIED Clause is hereby incorporated into Section 00700, in full, as shown below.

52.211-12 LIQUIDATED DAMAGES--CONSTRUCTION (SEP 2000)

(a) For the purposes of this Clause, the following stated amounts of liquidated damages apply to the delay associated with the work delineated below. The conditions and a detailed description of what constitutes the completion of the flood control work are located in Section 00800 of this document.

FLOOD CONTROL WORK: If the Contractor fails to complete all of the flood control work (floodwalls and structures) within the first 500 calendar days following the Contractor's acknowledgement of the Notice to Proceed letter, the Contractor shall pay liquidated damages to the Government in the amount of \$1,931.00 for each calendar day of delay until the work is completed or accepted.

REMAINING CONTRACT WORK: Should the Contractor fail to complete the remainder of the contract work (completion of landscaping items, recreation trails, demobilization and final cleanup of the premises) within 75 calendar days following its completion of the flood control work, the Contractor shall pay liquidated damages to the Government in the amount of \$1,931.00 for each calendar day of the delay until the work is completed or accepted.

(b) If the Government terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

(End of Clause)

(2) SECTION 00800 (SPECIAL CONTRACT REQUIREMENTS): By way of this Amendment 0002, the following provision is hereby added into Section 00800, in full text, as set forth below:

COMPLETION OF THE REQUIRED CONTRACT WORK:

The work of the contract requires the contractor to begin performance of the contract work within 10 calendar days following the Contractor's acknowledgment of the Notice to Proceed letter and complete all work of the contract within 575 calendar days following the Contractor's acknowledgment of the Notice to Proceed letter.

The Contractor is required to complete all flood control work (floodwalls and structures) within the first 500 calendar days following the Contractor's acknowledgement of the Notice to Proceed letter; the remainder of the allowable construction days, which equate to 75 calendar days, includes time for completion of landscaping items, recreation trails, demobilization and final cleanup of the premises.

The flood control work shall be considered complete when all work is complete except the following:

- Topsoil installation, landside of line of protection only;
- Turf, including seeding, establishment and acceptance;
- Removal of temporary fencing (except that necessary to provide flood fight access as described below);
- General site clean up (except that necessary to provide flood fight access as described below);
- Installation of permanent vehicle barriers (temporary barriers are to be maintained to protect completed work as necessary until all contract work is fully completed and accepted);
- Installation of permanent signage;
- Submittal and approval of as-built drawings;
- Submittal and approval of the Foundation Report.

A partial list of conditions that must be met in order for the flood control work to be considered complete is as follows:

- All permanent flood protection and flood fighting features must be completed and fully operational on both sides of the Little Calumet River, including the road closure structures at both ends of the flood walls.
- The flood protection features must be: completed to design elevations; sealed and joined as per the contract requirements to prevent infiltration of water from the river to land sides of the line of protection; continuous; and operational from the furthest east to the furthest west reaches of the project. Flood protection features shall include, but are not limited to: floodwall; earthen berms; backflow prevention devices and operators; closure structures; erosion protection; head and wing walls; etc.
- All required concrete test results must be submitted, must demonstrate that the concrete in the flood walls and all other flood protection features is in full compliance with Contract specification requirements, and must be approved by the Government.
- All required documentation demonstrating that sluice gates have been successfully tested in the presence of the manufacturer erecting engineer, repaired or adjusted as required, and found to be in full compliance with Contract requirements shall have been submitted and approved by the Government.
- Access features must be completed and operational as shown on the contract plans to provide for inspection, operation and flood fight efforts by federal state and local government entities as needed, including, but not limited to, access ramp surfaces and trail surfaces. The Contractor must maintain a 15 (fifteen) foot wide, level, continuous access way available on the landside of the flood protection features as shown on the contract drawings. This access way must be maintained and kept clear until the contract is fully completed and accepted.
- **C.** <u>AMENDED PROJECT SPECIFICATION SECTIONS</u>: Four Specification Sections have been amended as delineated below; therefore bidders shall replace the affected pages of the IFB, as were issued on 17 February 2009, with the respective pages attached hereto.

- 1) Section 01 10 00.00 03, revised paragraph 1.14.1, GENERAL CONSTRUCTION REQUIREMENTS.
- 2) Section 01 22 00.00 10, revised paragraphs 1.2.1.1, PAYMENT and 1.2.1.2, MEASUREMENT.
- 3) Section 03 30 00.00, revised paragraph 2.1.1, PRECAST MANUFACTURER'S QUALIFICATIONS.
- 4) Section 33 40 01.03, revised paragraph 2.3.4, PRECAST REINFORCED CONCRETE MANHOLES AND CATCH BASINS.
- **D.** <u>AMENDED PROJECT DRAWING SHEETS</u>: One drawing sheet has been amended as delineated below; therefore bidders shall replace the affected sheet of the IFB, as was issued on 17 February 2009, with the respective sheet attached hereto.
- 1) Drawing sheet C-30.
- **E.** <u>USACE ANSWER'S TO CONTRACTOR'S QUESTIONS</u>: Provided below are the USACE-Chicago District's answers to questions that were submitted by Contractor's over the past two weeks prior to the effective date of this Amendment.
- 1. **Question:** If the precast panel option is selected, should bottom of the precast panels be to the same elevations as shown on drawings C5 C14 using the typical reinforcing steel frequency as shown on S-23, or should all precast panels be cast for the bottom elevation of 594.75?

Answer: All precast panels shall be cast with a bottom elevation of 594.75 as shown on Drawing Sheet S-23. The precast panels are only used on the landside of the sheet pile. In the locations where the precast panels are being installed the landside finish grade is a constant 598.75 thus, the bottom of the precast panel elevation is set at 594.75.

2. **Question:** Geotextile fabric is shown in the Riprap Placement Detail on C-30, the Access Ramp typical section and the Recreation Trail typical section on R-09. Is payment for the required geotextile fabric at these various locations all covered under Pay Item 0012 through 0012AB?

Answer: Payment for all geotextile fabric at all the locations is covered under Bid Items 0012 through 0012AB.

3. **Question:** The Riprap Placement Detail on C-30 gives a bottom elevation of 586.0. The 586.0 elevation ties in with the inverts of the Columbia, Walnut and Northcote structures. The cross sections, for example on C-16, indicate the river bottom as the bottom of the riprap, approximately elevation 590, based on the 1.5 to 1 slope. For those areas shown on the Riprap Schedule (i.e. 7N 6+50 to 7N 9+50), does the riprap go to the existing river bottom elevation based on the 1.5 to 1 slope or is excavation required to make the toe of the riprap elevation 586.0?

Answer: All the cross section sheets do not reflect the actual river bottom. The elevations shown in the cross sections for the river are actually the water surface elevations taken at the

time of the survey, see note 5 on these sheets. From past experience the actual river bottom is approximately elevation 586.0. For all the areas listed in the riprap schedule, associated with the Riprap Placement Detail, the riprap should be placed at the 1.5 to 1 slope and shall extend to the existing river bottom. If the river bottom elevation is higher than elevation 586.0 it does not have to be excavated to that elevation.

4. **Question:** This question is relative to Section 03 30 00, Page 8, of the Special Provisions.

Part 2.1.1, Precast Manufacturer's Qualifications

This section states that the pre-cast provide must be Certified under the Prestress Concrete Institute Plant Certification Program.

McCann Concrete Products is a pre-cast concrete manufacturer in Illinois (mccannconcreteproducts.com), but which makes no pre-stress concrete products. We hope to provide pricing on the pre-cast retaining wall panels for this floodwall project, BUT we do not have (or need) PCI plant certification. Since the plan drawings do not show the precast panels as being pre-stressed, we are questioning the necessity of the PCI plant certification. PCI plant certification is expensive and takes months to complete.

We are a member of the National Precast Concrete Association (npca.org), and are a NPCA certified-plant producer. We are approved in Illinois, Indiana, Missouri, Kansas, and Nebraska (and soon Arkansas) to make various pre-cast concrete highway products, including retaining wall panels. The State of Indiana, in which the project is located, requires NPCA plant certification for its highway projects.

We request the Corps of Engineers allow the NPCA plant certification to suffice in lieu of the PCI certification. Without this change, we do not anticipate being able to provide reliable pricing to the "For Bid" contractors, and do anticipate potentially only a single precast panel provider (and price).

Answer: NPCA (National Precast Concrete Association) plant certification is acceptable and specification section 03 30 00.00, paragraph 2.1.1, Precast Manufacturer's Qualifications has been revised by way of this amendment.

- F. **PRE-BID MEETING**: A Pre-Bid Meeting was held in the Little Calumet River Basin Development Office at 10:00 a.m. CDT on March 3, 2009, wherein, brief overviews of the project and solicitation package were covered. During the meeting, participants fielded clarification type questions to the government that were answered. Following the meeting, participants were led to the site for a viewing. The attendance sheet from the meeting is attached herein.
- G. **POINT OF CONTACT:** The point of contact for this Amendment is Regina G. Blair at (312) 846-5371.

(End of Summary of Changes)

within the work limits. Such scheduling shall be accomplished with lead time sufficient for coordination of all involved parties as necessary for timely completion of each contract feature. As evidence of this compliance with this General Provision, the Contractor shall furnish the Contracting Officer's Representative (COR) with a copy of each coordinated schedule prior to commencing operations affecting such other Contractors, utilities, and/or property.

1.14.1 GENERAL CONSTRUCTION REQUIREMENTS

BP Pipelines provided general construction requirements for working around their utility lines. These requirements are provided in Attachment 1 and shall be followed by the Contractor.

The construction requirements may not be all inclusive and are subject to change. The attachment does not negate the Contractors responibility to coordinate with all impacted utility owners.

1.15 SPECIAL SAFETY REQUIREMENTS

The Contractor shall comply with all applicable Federal, state and local safety requirements including, but not limited to, those provided in EM 385-1-1.

1.16 ONE CALL SYSTEMS FOR EXCAVATORS

One call systems, established by law, are operated by owners of underground facilities for excavators. Upon notification by an excavator through a one call system, all participating operators of underground facilities in a covered area will identify and locate their facilities. One call systems will be identified by contacting the following:

INDIANA

INDIANA UTILITY CHECK 1-800-382-5544

1.17 ELECTRICAL POWER LINES

The Contractor shall study the construction plans and site and know in detail all locations of power lines within the rights of way. Prior to performing any construction operation adjacent to power lines, appropriate danger signs shall be provided where any equipment scheduled for use on the site is capable of contacting such lines. To confirm the location of underground lines, the Contractor shall contact the appropriate council listed in paragraph ONE CALL SYSTEMS FOR EXCAVATORS. Aerial power lines shall either be shut off and a positive means taken to prevent the lines from being energized, or clearances required by EM 385-1-1, Safety and Health Requirements Manual, shall be maintained. Work shall not proceed into dangerous areas without an additional workman being assigned the crew to watch the movements of other personnel and equipment to assure that designated clearances are maintained.

1.18 BORROW/DISPOSAL SITES AND QUARRIES

a. Definitions. For purposes of this general provision, the following definitions apply:

This paragraph, Borrow/Disposal Sites and Quarries, applies only to the ability of the Contractor to utilize a particular borrow/disposal site or

quarry, and does not address the use of materials from that site or quarry. Nothing in this paragraph, Borrow/Disposal, shall relieve the Contractor of complying with the specific testing requirements for material taken from any borrow/disposal sites or quarries as set forth in the technical provisions of this Contract.

- (1) Government-Suggested borrow/disposal site or quarry means a site or quarry suggested by the Government for use by the Contractor concerning which all applicable Federal, state and local environmental statutory and regulatory requirements may or may not have been satisfied.
- (2) Commercial/existing borrow/disposal site or quarry means a site or quarry which is either in the business of providing borrow material or has been used as a disposal site for other purposes and is available for use; and concerning which all applicable Federal, state and local environmental statutory and regulatory requirements have been satisfied.
- (3) Contractor-chosen borrow/disposal site or quarry means a site or quarry chosen by the Contractor for use concerning which none or not all of the applicable Federal, state and local environmental statutory and regulatory requirements have been satisfied.
- b. If a borrow/disposal site or quarry is identified in the contract specifications as Government-Suggested, it is the responsibility of the Contractor to ascertain whether or not all Federal, state and local environmental statutory and regulatory requirements have been satisfied. If any of such requirements have not been satisfied, the Contractor is required to follow the procedures set forth in paragraph d(4) below. Use of such a site or quarry must be approved by the Contracting Officer.
- c. If the Contractor chooses a commercial/existing borrow/disposal site or quarry, the Contractor is not required to ensure that all applicable Federal, state and local environmental statutory and regulatory requirements have been satisfied, but is required to provide to the Government either, as a minimum, a letter from the owner/operator of the commercial/existing borrow/disposal site or quarry certifying that all environmental and operating permits have been acquired, or actual copies of all such environmental and operating permits. Use of such a site or quarry must be approved by the Contracting Officer. The Contractor shall adhere to all rules, regulations and business practices required by the owner/operator.
- d. If a Contractor decides to use a Contractor-chosen borrow/disposal site or quarry, it is the Contractor's responsibility to ensure that all applicable Federal, state and local environmental statutory and regulatory requirements have been satisfied. Use of such a site or quarry must be approved by the Contracting Officer, and such approval shall not be granted unless all applicable requirements have been met and such use of the site does not pose significant environmental impacts.
 - (1) The specific requirements which must be met by the Contractor before a Contractor-chosen (or, when applicable, a Government-recommended) site or quarry shall be approved by the COR include, at a minimum, but are not necessarily limited to,

compliance with the following environmental laws, regulations and executive orders:

Federal Laws, Regulations, and Executive Orders

Agency

Name Agency
Section 404, U.S. Army Corps of Engineers,
Clean Water Act Detroit District (IN/WI)

(Permit) Chicago District (II) (Permit) Chicago District (IL)

Section 10, River U.S. Army Corps of Engineers and Harbor Act of 1899 (Permit)

Emission U.S. Environmental Protection Limitations, Agency

Clean Air Act

Section 9, U.S. Fish and Wildlife Service, Endangered Species Barrington Office (IL)
Act of 1973 Bloomington Office (IN)
Green Bay Office (WI) Green Bay Office (WI)

Section 703, U.S. Fish and Wildlife Service Migratory Bird Treaty Act of 1918

Section 106, Indiana Department of Natural Resources, National Historic Division of Historic Preservation (IN)

Preservation Act of 1966

Flood Plain U.S. Army Corps of Management, Engineers, Chicago Engineers, Chicago District

Executive Order 11988

Surface Mining Bureau of Mines

Control and Reclamation

Act of 1977

Resource U.S. Environmental Protection

Conservation and Agency

Recovery Act of 1976

Toxic Substance U.S. Environmental Protection

Control Act Agency

Indiana State Statutes

Construction Indiana Department of Natural Within a Floodway Natural Resources, (Permit) Division of Water

Section 401, Indiana Department of Environmental Clean Water Act Management

(Waiver of Permit)

Section 402, Indiana Department of Environmental Clean Water Act Management

(NPDES Permit)

It is the Contractor's responsibility to ensure that all applicable Federal, state and local environmental statutory and regulatory requirements are satisfied, regardless of their presence on, or absence from, the above list.

- (2) It is the responsibility of the Government to ensure that the requirements of the National Environmental Policy Act (NEPA) have been complied with. If the Contractor decides to use a site or quarry which has not previously undergone an environmental review under NEPA (either Government-recommended or Contractor-chosen), the Contractor shall notify the Contracting Officer, who shall arrange for such an environmental review. This review and compliance process may include inter-agency coordination and the preparation and circulation for public review of environmental documentation. It is the responsibility of the Contractor to allow sufficient time in the construction schedule to accommodate this review and compliance process, and to provide the Contracting Officer with any and all information that the Contracting Officer deems necessary to facilitate the process. The review and compliance process requires a minimum time frame of ninety (90) calendar days, but could take substantially longer, possibly up to one year or, in unusual circumstances, even longer than one year, to complete. Any construction delays caused by the need to conduct an environmental review under NEPA shall be solely the responsibility of the Contractor, at no additional cost to the Government.
- (3) It is also the responsibility of the Government to perform Section 7 consultation under the Endangered Species Act, to coordinate with the U.S. Fish and Wildlife Service and appropriate state wildlife agencies under the Fish and Wildlife Coordination Act, and to perform a Farmland Conversion Impact Rating under the Farmland Protection Policy Act for all Government-Suggested or Contractor-Chosen sites. This shall be accomplished concurrently with the NEPA environmental review process. It is the responsibility of the Contractor to allow sufficient time in the construction schedule to accommodate these consultation and coordination requirements as well as the NEPA review process, and to provide the Contracting Officer with any and all information that the Contracting Officer deems necessary to facilitate the completion of these consultation and coordination requirements.
- The Government cannot guarantee that any Government-Suggested or Contractor-chosen site is capable of complying with all applicable Federal, state and local environmental statutory and regulatory requirements and may reject any such site proposed for use by the Contractor for environmental reasons. If the Contracting Officer does not approve the use of a Government-recommended or Contractor-chosen borrow/disposal site or quarry because not all applicable Federal, state or local environmental statutory and regulatory requirements have been satisfied, or because the Government determines that such site or quarry could not be used for environmental reasons as a result of the environmental review under NEPA, it is the Contractor's responsibility to locate an alternate site or quarry and to perform all necessary reviews to obtain approval of the use of such alternative site or quarry. Any construction delays caused by the need to locate an alternate site or quarry, shall be solely the responsibility of the Contractor, at no additional cost to the

Government.

(5) Nothing in this clause shall relieve the Contractor from the responsibility of obtaining all non-environmental permits and licenses which may be required under Federal, state or local statutes, regulations and ordinances.

1.19 TAX EXEMPTION

- a. This contract is a construction contract which contains separate amounts applicable to the performance of the services and the furnishing of the materials as defined in State of Indiana, Department of Revenue Information Bulletin No. 60, dated Dec 2002. Notwithstanding any other provisions of this contract, the contract price does not include any amount for Indiana Sales and Use Tax on materials to be incorporated by the Contractor or Subcontractor into the structure or improvement to real estate. The Contractor or Subcontractor should provide his supplier with a State of Indiana General Exemption Certificate for Construction Contractors (Form ST-134) with respect to such property.
- b. For the purpose of complying with the requirements of State of Indiana, Department of Revenue Information Bulletin No. 60, dated Dec 2002, the Contractor, pursuant to the requirements of the solicitation shall furnish prior to contract award a breakdown separating pricing (1) materials to be incorporated into the structure or improvement to real estate, (2) services and other obligations of the construction contract, and (3) the total contract price. This breakdown is for the sole purpose of complying with the requirements of State of Indiana, Department of Revenue Information Bulletin No. 60, dated Dec 2002 with regard to separate pricing of services and materials and has no other contractual significance.
- c. Any subcontracts awarded hereunder shall also contain separate amounts applicable to the performance of services and the furnishing of the materials.

1.20 PROGRESS MEETINGS

A progress meeting will be held once every two weeks (biweekly). The meetings shall be held on-site, in the contractor's field trailer, unless the Government elects to hold the meetings at an alternate off-site location. The day and time for conducting meetings will be mutually agreed to between the Contractor, the Government, the Local Sponsors and other participants as required, within 30 calendar days after receipt of the notice to proceed. The Contractor shall be a required to fully participate in the progress meeting.

Unless the Contracting Officer's Representative (COR) specifically indicates in writing otherwise, the Contractor shall prepare meeting agendas and meeting minutes for each meeting. The agenda and minutes shall be prepared in a format acceptable to the COR and shall contain all information required by the COR, including, but not limited to:

- a. A listing of all meeting participants;
- b. The financial progress, including original and current contract amounts, the amount paid to date, and original and current contract

completion dates;

- c. A list of work completed since the last meeting;
- d. A list of work activities scheduled for the upcoming two weeks;
- e. Critical work activities in the project schedule;
- f. Old business, including summaries of the status of unresolved issues discussed at previous progress meetings;
- g. New business, including summaries of issues that need to be addressed and have not been included in previous meeting minutes;
- h. Potential items of interest to the public, local sponsor, or local community;
- i. The status of submittals, including lists of outstanding submittals, key submittals in review, and upcoming submittals;
- j. A listing of all field changes/modifications.

The progress meeting minutes shall be submitted to the Government and all other meeting participants for review and approval within seven days of the meeting. The review and approval process will allow for mutual acceptance of the minutes as written. As directed by the Government, the Contractor shall edit the minutes to add, delete, and/or correct items that were covered in the weekly meeting. The edited meeting minutes shall then be resubmitted within 7 days of the receipt of the Government comments.

1.21 Contractor Performance Evaluations

It is the Corps' standard operating procedure that the Contracting Officer evaluate the Contractor's performance and prepare a performance report using the web-based application CCASS (Construction Contractor Appraisal Support System) for construction contracts of \$100,000 or more. After an evaluation (interim or final) is written up by the Corps, the Contractor has a 30 day period to access, review and comment on the evaluation. Accessing and using CCASS requires having specific software, called PKI certification, installed on the user's computer. The certification, a Department of Defense requirement, was implemented to provide security in electronic transactions. The certification software could cost approximately \$100 - \$125 per certificate per year and is purchased from an External Certificate Authorities (ECA) vendor, it is the responsibility of the Contractor to verify the current cost of the software. Current information about the PKI certification process and for contacting vendors can be found on the web site: http://www.cpars.navy.mil/. If the Contractor wishes to participate in the performance evaluation process, access to CCASS and PKI certification is the sole responsibility of the Contractor.

- PART 2 PRODUCTS (Not Applicable)
- PART 3 EXECUTION (Not Applicable)
 - -- End of Section --

price payments will be made are listed in the BIDDING SCHEDULE and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items.

1.2.1 REMOVE EXISTING OUTFALL AND TIE INTO EXISTING PIPE (Bid Item 0004)

1.2.1.1 Payment

Payment will be made at the contract unit price for the removal of existing outfalls and ties <u>made</u> into existing pipes <u>at the proposed manhole</u> <u>loactions</u> as shown on the contract drawings. Payment constitutes full compensation for all labor, materials, equipment, tools, <u>removal of</u> existing bulkheads, and incidentals necessary to complete the work.

1.2.1.2 Measurement

Measurement will be based on the number of existing sewer outfalls removed and ties made to existing pipes at the proposed manhole locations performed.

1.2.1.3 Unit of Measure

Unit of measure: Each (EA).

1.2.2 REMOVE AND PLUG EXISTING SEWER LINES (Bid Item 0005)

1.2.2.1 Payment

Payment will be made at the contract unit price for the removal and plugging of existing sewer lines as shown on the contract drawings. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.2.2 Measurement

Measurement will be based on the number of existing sewer lines removed and plugged.

1.2.2.3 Unit of Measure

Unit of measure: Each (EA).

1.2.3 REMOVE EXISTING SEWER LINE (Bid Item 0020AA)

1.2.3.1 Payment

Payment will be made at the contract unit price for the removal of existing sewer line as shown on the contract drawings. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.3.2 Measurement

Measurement will be based on the number of existing sewer lines removed.

1.2.3.3 Unit of Measure

Unit of measure: Each (EA).

1.2.4 STEEL SHEET PILING, PZ-22 (Bid Items 0006AB, 0007AB, 0008AB, 0009AB, 0020AC, 0021AB, and 0022AB)

1.2.4.1 Payment

Payment at the contract unit price will be made for the installation of steel sheet piling as described in SECTION 35 49 13.10 03 METAL SHEET PILING, including removing and disposing of all materials. Payment constitutes full compensation for all necessary labor, equipment, materials, steel channels and bars, and other incidental items necessary to complete the work.

1.2.4.2 Unit of Measure

Unit of measure: Square Feet (SF)

1.2.5 RIPRAP FIRST 12,300 TONS (Bid Item 0010AA)

1.2.5.1 Payment

Payment at the contract unit price for riprap material acceptably placed and within the tolerances required as described in SECTION 31 37 16.00 03 RIP RAP FOR EROSION CONTROL will be made. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work, including but not limited to grading as indicated in the drawings.

Deductions: All stone permitted by the Contracting Officer to remain outside the tolerances required will be deducted from the quantity to be paid for. Volume of excess stone will be computed, using the average end area of excess above the tolerance line. The excess volume will be deducted from the payment quantity at a rate of 135 pounds per cubic foot regardless of actual weight per cubic foot.

1.2.5.2 Measurement

Stone material shall be weighed on accurate, approved scales furnished or made available by the Contractor. Before being approved for use, the scales shall have been tested by the State of Indiana Department of Weights and Measures, or by a reliable scale servicing company, so as to operate within a degree of error not greater than one percent, and be sensitive to a change in load of one-fifth of one percent: both percentages being based on the total required weight of material normally weighed as a unit on the scale. Scales shall be spot checked for accuracy and sensitivity at least once a week as the contract work progresses. When materials are weighed in hauling vehicles, gross weights shall be checked and the vehicle tare weight determined as often as the Contracting Officer directs. The Contractor shall furnish such weights, accessories, and assistance as the Contracting Officer may require for making weighing equipment tests.

Weighing operations shall be performed offsite, as approved, in the presence of the Contracting Officer, unless waived. Each load shall be accompanied by duplicate copies of delivery tickets certified by the weighmaster. At a minimum each ticket shall contain the following: Date and time, Vehicle number, Gross weight, Vehicle tare weight, Net weight,

Material weighed, and Signature of weighmaster. Delivery tickets shall be collected by the Contractor, and one copy thereof furnished to the Contracting Officer at the close of each day's operations.

1.2.5.3 Unit of Measure

Unit of measure: Ton (TN)

1.2.6 RIPRAP OVER 12,300 TONS (Bid Item 0010AB)

1.2.6.1 Payment

Payment at the contract unit price for riprap material acceptably placed and within the tolerances required as described in SECTION 31 37 16.00 03 RIP RAP FOR EROSION CONTROL will be made. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work, including but not limited to grading as indicated in the drawings.

Deductions: All stone permitted by the Contracting Officer to remain outside the tolerances required will be deducted from the quantity to be paid for. Volume of excess stone will be computed, using the average end area of excess above the tolerance line. The excess volume will be deducted from the payment quantity at a rate of 135 pounds per cubic foot regardless of actual weight per cubic foot.

1.2.6.2 Measurement

Stone material shall be weighed on accurate, approved scales furnished or made available by the Contractor. Before being approved for use, the scales shall have been tested by the State of Indiana Department of Weights and Measures, or by a reliable scale servicing company, so as to operate within a degree of error not greater than one percent, and be sensitive to a change in load of one-fifth of one percent: both percentages being based on the total required weight of material normally weighed as a unit on the scale. Scales shall be spot checked for accuracy and sensitivity at least once a week as the contract work progresses. When materials are weighed in hauling vehicles, gross weights shall be checked and the vehicle tare weight determined as often as the Contracting Officer directs. The Contractor shall furnish such weights, accessories, and assistance as the Contracting Officer may require for making weighing equipment tests.

Weighing operations shall be performed offsite, as approved, in the presence of the Contracting Officer, unless waived. Each load shall be accompanied by duplicate copies of delivery tickets certified by the weighmaster. At a minimum each ticket shall contain the following: Date and time, Vehicle number, Gross weight, Vehicle tare weight, Net weight, Material weighed, and Signature of weighmaster. Delivery tickets shall be collected by the Contractor, and one copy thereof furnished to the Contracting Officer at the close of each day's operations.

1.2.6.3 Unit of Measure

Unit of measure: Ton (TN)

1.2.7 BEDDING STONE FIRST 2,200 TONS (Bid Item 0011AA)

1.2.7.1 Payment

Payment at the contract unit price for bedding stone material acceptably placed and within the tolerances required as described in SECTION 31 37 16.00 03 RIP RAP FOR EROSION CONTROL will be made. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work, including but not limited to grading as indicated in the drawings.

Deductions: All stone permitted by the Contracting Officer to remain outside the tolerances required will be deducted from the quantity to be paid for. Volume of excess stone will be computed, using the average end area of excess above the tolerance line. The excess volume will be deducted from the payment quantity at a rate of 130 pounds per cubic foot regardless of actual weight per cubic foot.

1.2.7.2 Measurement

Stone material shall be weighed on accurate, approved scales furnished or made available by the Contractor. Before being approved for use, the scales shall have been tested by the State of Indiana Department of Weights and Measures, or by a reliable scale servicing company, so as to operate within a degree of error not greater than one percent, and be sensitive to a change in load of one-fifth of one percent: both percentages being based on the total required weight of material normally weighed as a unit on the scale. Scales shall be spot checked for accuracy and sensitivity at least once a week as the contract work progresses. When materials are weighed in hauling vehicles, gross weights shall be checked and the vehicle tare weight determined as often as the Contracting Officer directs. The Contractor shall furnish such weights, accessories, and assistance as the Contracting Officer may require for making weighing equipment tests.

Weighing operations shall be performed offsite, as approved, in the presence of the Contracting Officer, unless waived. Each load shall be accompanied by duplicate copies of delivery tickets certified by the weighmaster. At a minimum each ticket shall contain the following: Date and time, Vehicle number, Gross weight, Vehicle tare weight, Net weight, Material weighed, and Signature of weighmaster. Delivery tickets shall be collected by the Contractor, and one copy thereof furnished to the Contracting Officer at the close of each day's operations.

1.2.7.3 Unit of Measure

Unit of measure: Ton (TN)

1.2.8 BEDDING STONE OVER 2,200 TONS (Bid Item 0011AB)

1.2.8.1 Payment

Payment at the contract unit price for bedding stone material acceptably placed and within the tolerances required as described in SECTION 31 37 16.00 03 RIP RAP FOR EROSION CONTROL will be made. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work, including but not limited to grading as indicated in the drawings.

Deductions: All stone permitted by the Contracting Officer to remain

outside the tolerances required will be deducted from the quantity to be paid for. Volume of excess stone will be computed, using the average end area of excess above the tolerance line. The excess volume will be deducted from the payment quantity at a rate of 130 pounds per cubic foot regardless of actual weight per cubic foot.

1.2.8.2 Measurement

Stone material shall be weighed on accurate, approved scales furnished or made available by the Contractor. Before being approved for use, the scales shall have been tested by the State of Indiana Department of Weights and Measures, or by a reliable scale servicing company, so as to operate within a degree of error not greater than one percent, and be sensitive to a change in load of one-fifth of one percent: both percentages being based on the total required weight of material normally weighed as a unit on the scale. Scales shall be spot checked for accuracy and sensitivity at least once a week as the contract work progresses. When materials are weighed in hauling vehicles, gross weights shall be checked and the vehicle tare weight determined as often as the Contracting Officer directs. The Contractor shall furnish such weights, accessories, and assistance as the Contracting Officer may require for making weighing equipment tests.

Weighing operations shall be performed offsite, as approved, in the presence of the Contracting Officer, unless waived. Each load shall be accompanied by duplicate copies of delivery tickets certified by the weighmaster. At a minimum each ticket shall contain the following: Date and time, Vehicle number, Gross weight, Vehicle tare weight, Net weight, Material weighed, and Signature of weighmaster. Delivery tickets shall be collected by the Contractor, and one copy thereof furnished to the Contracting Officer at the close of each day's operations.

1.2.8.3 Unit of Measure

Unit of measure: Ton (TN)

1.2.9 GEOTEXTILE FABRIC FIRST 7,400 SQUARE YARDS (Bid Item 0012AA)

1.2.9.1 Payment

Payment will be made at the contract unit price for placing geotextile fabric as described in SECTION 31 05 19.13 03 GEOTEXTILES USED AS FILTERS AND UNDERLAYS. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.9.2 Unit of Measure

Unit of measure: Square Yard (SY).

1.2.10 GEOTEXTILE FABRIC OVER 7,400 SQUARE YARDS (Bid Item 0012AB)

1.2.10.1 Payment

Payment will be made at the contract unit price for placing geotextile fabric as described in SECTION 31 05 19.13 03 GEOTEXTILES USED AS FILTERS AND UNDERLAYS. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.10.2 Unit of Measure

Unit of measure: Square Yard (SY).

1.2.11 TEMPORARY CHAIN LINK FENCING & GATES (Bid Item 0013AA)

1.2.11.1 Payment

Payment at the contract unit price will be made for installation, maintenance, and removal of temporary chain link fencing and gates described in SECTION 01 56 26.03 FENCING AND GATES and identified on the contract drawings. Payment constitutes full compensation for furnishing, installing, removing, and disposing of all materials used for the chain link fencing and gates and for providing all necessary labor, equipment, and other incidental items necessary to complete the work.

1.2.11.2 Measurement

The length of temporary chain link fencing and gates erected shall be measured for payment in linear feet installed.

1.2.11.3 Unit of Measure

Unit of measure: Linear Feet (LF).

1.2.12 TEMPORARY CONSTRUCTION FENCING (Bid Item 0013AB)

1.2.12.1 Payment

Payment at the contract unit price will be made for installation, maintenance, and removal of temporary construction fencing described in SECTION 01 56 26.03 FENCING AND GATES and identified on the contract drawings. Payment constitutes full compensation for furnishing, installing, removing, and disposing of all materials used for the temporary construction fencing and for providing all necessary labor, equipment, and other incidental items necessary to complete the work.

1.2.12.2 Measurement

The length of temporary construction fencing erected shall be measured for payment in linear feet installed.

1.2.12.3 Unit of Measure

Unit of measure: Linear Feet (LF).

1.2.13 LOWER EXISTING DRAINAGE STRUCTURES (Bid Item 0014)

1.2.13.1 Payment

Payment will be made at the contract unit price for lowering existing drainage structures as shown on the contract drawings. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.13.2 Measurement

Measurement will be based on the number of existing drainage structures lowered and accepted.

1.2.13.3 Unit of Measure

Unit of measure: Each (EA).

1.2.14 18" RCP CLASS IV PIPE (Bid Item 0015)

1.2.14.1 Payment

Payment will be made at the contract lump sum price for furnishing and installing class IV 18" reinforced concrete pipe (RCP) as shown on the contract drawings. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.14.2 Measurement

The length of 18" reinforced concrete pipe installed shall be measured for payment in linear feet installed.

1.2.14.3 Unit of Measure

Unit of measure: Linear Feet (LF).

1.2.15 CATCH BASIN (Bid Item 0016)

1.2.15.1 Payment

Payment will be made at the contract unit price for catch basin as described in SECTION 33 40 01.03 STORM DRAINAGE SYSTEM, and as shown in the contract drawings. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.15.2 Measurement

Measurement will be based on the number of catch basins installed and accepted.

1.2.15.3 Unit of Measure

Unit of measure: Each (EA).

1.2.16 MANHOLE (Bid Item 0017)

1.2.16.1 Payment

Payment will be made at the contract unit price for manhole as described in SECTION 33 40 01.03 STORM DRAINAGE SYSTEM, and as shown in the contract drawings. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.16.2 Measurement

Measurement will be based on the number of manholes installed and accepted.

1.2.16.3 Unit of Measure

Unit of measure: Each (EA).

1.2.17 SPOIL BANK EXCAVATION (Bid Item 0018AA)

1.2.17.1 Payment

Payment will be made at the contract unit price for excavation of the existing spoil banks as indicated on the drawings and as described in SECTION 31 00 00 EARTHWORK, including excavating, loading, hauling, stockpiling and/or disposal of this material. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.17.2 Measurement

Excavation will be measured for payment by the cubic yard. Quantities shall be determined by the average end area method every 100 feet, or as directed by the Contracting Officer. The Contractor shall perform original and final surveys for the purpose of measuring quantities for payment. The Contractor shall notify the Contracting Officer's representative sufficiently in advance of the start of the excavtion operation and upon completion of the excavation operation to afford sufficient time during which to be present for the surveys. The surveys shall be performed by an independent licensed surveyor. The original ground survey, final quantity survey and quantity calculations for excavation of the existing spoil bank shall be submitted for approval within 20 calendar days after completion of excavation for each clearly definable section of work. Interim pay requests for these unit price quantities can be estimated using truck count method or any other gross quantity estimating process approved by the Government. Unless otherwise approved, pay estimate unit quantities for existing spoil bank excavation will be capped at 80% of the bid item quantity until the complete final quantity survey and quantity calculations have been submitted and approved.

1.2.17.3 Unit of Measure

Unit of Measure: Cubic Yards (CY)

1.2.18 SATISFACTORY FILL (Bid Item 0018AB)

1.2.18.1 Payment

Payment will be made at the contract unit price for satisfactory fill placed as described in SECTION 31 00 00 EARTHWORK, including testing, excavating, loading, hauling, placing and compacting of this material. Payment constitutes full compensation for furnishing all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.18.2 Measurement

Satisfactory fill used for the embankment construction will be measured for payment by the cubic yard, in-place. Quantities shall be determined by the average end area method every 100 feet, or as directed by the Contracting Officer. Pre-placement surveys shall be taken after the necessary stripping, excavation, and other preparation of the area has been performed. The Contractor shall notify the Contracting Officer's representative sufficiently in advance of the start of the placing operation to afford sufficient time during which to be present for the necessary original measurements. The final quantity survey and quantity calculations for satisfactory fill shall be submitted for approval within 20 calendar days after completion of filling operations for each clearly

definable section of work. Interim pay requests for fill quantities can be estimated using truck count method or any other gross quantity estimating process approved by the Government. Unless otherwise approved, pay estimate unit quantities for fill will be capped at 80% of the bid item quantity until the complete final quantity survey and quantity calculations have been submitted and approved.

Upon completion of the placement operation, the Contractor will notify the Contracting Officer's representative that final surveys will be performed. The contractor shall have the surveys performed by an independent licensed surveyor. The Contractor should note that subsurface soils may be compressible, and shrinkage and settlement may occur during construction. No additional volume of satisfactory fill shall be added to the survey quantity to account for settlement or shrinkage, but shall be incidental to construction. The quantity of satisfactory fill computed in the aforementioned paragraphs shall constitute the total measurement quantity for payment. No other method or means of determining quantities of placed satisfactory fill materials will be considered.

1.2.18.3 Unit of Measure

Unit of Measure: Cubic Yards (CY)

1.2.19 HEAVY DUTY SLUICE GATES AND EQUIPMENT (Bid Items 0020AF and 0021AC)

1.2.19.1 Payment

Payment will be made at the contract unit price for heavy duty sluice gates and equipment as described in SECTION 33 49 33.00 03 SLUICE GATES, FLAP GATES, AND CHECK VALVES, and as shown in the contract drawings. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.19.2 Measurement

Measurement will be based on the number of sluice gates installed and accepted.

1.2.19.3 Unit of Measure

Unit of measure: Each (EA).

1.2.20 FLEXIBLE CHECK VALVES INCLUDING THIMBLES (Bid Items 0020AG, 0021AD, and 0022AC)

1.2.20.1 Payment

Payment will be made at the contract unit price for flexible check valves including thimbles as described in SECTION 33 49 33.00 03 SLUICE GATES, FLAP GATES, AND CHECK VALVES, and as shown in the contract drawings. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.20.2 Measurement

Measurement will be based on the number of flexible check valves installed and accepted.

1.2.20.3 Unit of Measure

Unit of measure: Each (EA).

1.2.21 FLAP GATES INCLUDING THIMBLES (Bid Items 0022AD and 0022AE)

1.2.21.1 Payment

Payment will be made at the contract unit price for flap gates including thimbles as described in SECTION 33 49 33.00 03 SLUICE GATES, FLAP GATES, AND CHECK VALVES, and as shown in the contract drawings. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.21.2 Measurement

Measurement will be based on the number of flap gates installed and accepted.

1.2.21.3 Unit of Measure

Unit of measure: Each (EA).

1.2.22 HEAVY DUTY ELECTRIC WRENCH INCLUDING SLIP CLUTCH AND PORTABLE CABLE (Bid Items 0020AH, 0021AF, and 0022AF)

1.2.22.1 Payment

Payment will be made at the contract unit price for heavy duty electric wrenches including slip clutches and portable cables. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.22.2 Measurement

Measurement will be based on the number of heavy duty electric wrenches including slip clutches and portable cables supplied and accepted.

1.2.22.3 Unit of Measure

Unit of measure: Each (EA).

1.2.23 SAFETY SCREEN TRASH RACK (Bid Item 0021AE)

1.2.23.1 Payment

Payment will be made at the contract unit price for the safety screen trash rack as shown in the contract drawings. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.23.2 Measurement

Measurement will be based on the number of safety screen trash racks installed and accepted.

1.2.23.3 Unit of Measure

Unit of measure: Each (EA).

1.2.24 BITUMINOUS SURFACE and BINDER COURSE (Bid Item 0023AA)

1.2.24.1 Payment

Payment will be made at the contract unit price per ton for bituminous surface and binder course as described in SECTION 32 10 00.00 BITUMINOUS CONCRETE PAVEMENT. Payment constitutes full compensation for furnishing all materials, equipment, plant, and tools; and for labor and other incidentals necessary to complete work required. Prime/tack coat, as necessary, shall be included in surface course payment.

No separate measurement or direct payment will be made for bituminous pavement used to repair street cuts for structure installations. All associated costs for repair work shall be included with the applicable unit prices in the Bid Schedule.

1.2.24.2 Unit of Measure

Unit of Measure: Ton (TN)

1.2.25 LIMESTONE SCREENINGS (Bid Item 0023AB)

1.2.25.1 Payment

Payment will be made at the contract unit price for crushed aggregate and limestone screening as described in SECTION 32 11 23.00 GRADED CRUSHED AGGREGATE BASE COURSE. Payment constitutes full compensation for labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.25.2 Measurement

Limestone screenings will be measured for payment in cubic yards of trail surface materials, completed and accepted.

1.2.25.3 Unit of Measure

Unit of Measure: Cubic Yards (CY)

1.2.26 CRUSHED AGGREGATE, CA-53 (Bid Item 0023AC)

1.2.26.1 Payment

Payment will be made at the contract unit price for crushed aggregate, CA-53 as described in SECTION 32 11 23.00 GRADED CRUSHED AGGREGATE BASE COURSE. Payment constitutes full compensation for labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.26.2 Measurement

Crushed aggregate, CA-53 will be measured for payment in cubic yards of trail surface materials, completed and accepted.

1.2.26.3 Unit of Measure

Unit of Measure: Cubic Yards (CY)

1.2.27 VEHICLE BARRIER TYPE I (Bid Item 0023AD)

1.2.27.1 Payment

Payment at the contract unit price will be made for furnishing and installing fixed and removable bollards as indicated on the drawings.

Vehicle Barrier - Type I is indentified in the bid schedule as a set. A set consist of two fixed bollards and one removable bollards.

Payment constitutes full compensation for all materials and labor associated with site preparation, excavating and backfilling and other incidental items necessary to complete the work.

1.2.27.2 Measurement

Vehicle barriers will be measured for payment by the number of vehicle barriers constructed in place, and accepted.

1.2.27.3 Unit of Measure

Unit of measure: EACH (EA)

1.2.28 A-FRAME GATES (Bid Item 0023AE)

1.2.28.1 Payment

Payment at the contract unit price will be made for furnishing and installing A-frame gates as indicated on the drawings. Payment constitutes full compensation for all materials and labor associated with site preparation, excavating and backfilling and other incidental items necessary to complete the work.

1.2.28.2 Measurement

A-frame gates will be measured for payment by the number of gates constructed in place, and accepted.

1.2.28.3 Unit of Measure

Unit of measure: EACH (EA)

1.2.29 VEHICLE BARRIER TYPE II (Bid Item 0023AG)

1.2.29.1 Payment

Payment at the contract unit price will be made for furnishing and installing fixed bollards as indicated on the drawings.

Vehicle Barrier - Type II is indentified in the bid schedule as a set. A set consist of two fixed bollards.

Payment constitutes full compensation for all materials and labor associated with site preparation, excavating and backfilling and other incidental items necessary to complete the work.

1.2.29.2 Measurement

Vehicle barriers will be measured for payment by the number of vehicle

barriers constructed in place, and accepted.

1.2.29.3 Unit of Measure

Unit of measure: EACH (EA)

1.2.30 SEEDING (Bid Item 0024AA)

1.2.30.1 Payment

Payment will be made at the contract unit price for seeding as described in SECTION 32 92 19.13 TURF, including excavating, loading, hauling, and placing of this material. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.30.2 Measurement

The seeding will be measured for payment in acres of seed, completed and accepted. Unless otherwise approved, pay estimate unit quantities for seeding will be capped at 50% of the bid item quantity until it has been determined that the turf has met all establishment requirements and the final quantity survey and quantity calculations have been submitted and approved.

1.2.30.3 Unit of Measuree

Unit of measure: Acre (AC)

1.2.31 TOPSOIL (Bid Item 0024AB)

1.2.31.1 Payment

Payment will be made at the contract unit price for topsoil as described in SECTION 31 00 00 EARTHWORK, including excavating, loading, hauling, and placing of this material. Payment constitutes full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.2.31.2 Measurement

Topsoil will be measured by the cubic yard. The material will be measured in its final position by the average end area method every 100 feet. The Contractor shall perform original and final surveys for the purpose of measuring quantities for payment. The Contractor shall notify the Contracting Officer's representative sufficiently in advance of the start of the topsoil operation and upon completion of the topsoil operation to afford sufficient time during which to be present for the surveys. surveys shall be performed by an independent licensed surveyor. Topsoil stripping and stockpiling at the borrow site will not be measured for payment and costs associated with the operations shall be considered incidental to the borrow site development. The final quantity survey and quantity calculations for topsoil shall be submitted for approval within 20 calendar days after completion of topsoil operations for each clearly definable section of work. Interim pay requests for topsoil quantities can be estimated using truck count method or any other gross quantity estimating process approved by the Government. Unless otherwise approved, pay estimate unit quantities for topsoil will be capped at 80% of the bid item quantity until the complete final quantity survey and quantity

calculations have been submitted and approved.

1.2.31.3 Unit of Measure

Unit of measure: Cubic Yard (CY)

1.2.32 CAST-IN PLACE CONCRETE FLOODWALL (Alternative Bid Item 0025)

1.2.32.1 Payment

The Contractor shall select one concrete floodwall from the two alternatives provided: cast-in place concrete floodwall or pre-cast concrete floodwall.

If selected by the Contractor as an alternative concrete floodwall, payment at the contract unit price shall be made for the cast-in place concrete floodwalls, retaining walls, and pilasters as shown on the contract drawings, and shall constitute full compensation for all necessary labor, equipment, materials, costs of all work associated with placing the concrete, excavation, backfill, formwork, reinforcing steel, steel sheet piling and all other incidental costs required to complete this work.

1.2.32.2 Measurement

Measurement for payment for cast-in place concrete floodwall will be based on the actual number of linear feet of completed floodwall, as measured by the Contracting Officer. The floodwall will be measured horizontally at the vertical centerline of the floodwall between the point of beginning and point of end of the floodwall, as shown on the contract drawings. Measurement will be made to the nearest 0.1 foot.

1.2.32.3 Unit of Measure

Unit of measure: Linear Feet (LF).

1.2.33 CAST-IN PLACE CONCRETE FLOODWALL COMPONENTS (Alternative Bid Item 0026AA)

1.2.33.1 Payment

The Contractor shall select one concrete floodwall from the two alternatives provided: cast-in place concrete floodwall or pre-cast concrete floodwall.

If selected by the Contractor as an alternative concrete floodwall, payment at the contract unit price will be made for the cast-in place component of the pre-cast concrete floodwalls, retaining walls, and pilasters as shown on the contract drawings, and shall constitute full compensation for all necessary labor, equipment, materials, excavation, backfill, concrete, formwork, reinforcing steel, steel sheet piling, and all other incidental costs required to complete this work.

1.2.33.2 Measurement

Measurement for payment for cast-in place concrete floodwall components will be based on the actual number of linear feet of completed floodwall, as measured by the Contracting Officer. The floodwall will be measured horizontally at the vertical centerline of the floodwall between the point of beginning and point of end of the floodwall, as shown on the contract

drawings. Measurement will be made to the nearest 0.1 foot.

1.2.33.3 Unit of Measure

Unit of measure: Linear Feet (LF).

1.2.34 PRE-CAST CONCRETE FLOODWALL COMPONENTS (Alternative Bid Item 0026AB)

1.2.34.1 Payment

The Contractor shall select one concrete floodwall from the two alternatives provided: cast-in place concrete floodwall or pre-cast concrete floodwall.

If selected by the Contractor as an alternative concrete floodwall, payment at the contract unit price will be made for the pre-cast concrete component floodwalls, and retaining walls as shown on the contract drawings, and shall constitute full compensation for all necessary labor, equipment, materials, excavation, backfill, pre-cast concrete, formwork, reinforcing steel, steel sheet piling, and all other incidental costs required to complete this work.

1.2.34.2 Measurement

Measurement for payment for pre-cast concrete floodwall components will be based on the actual number of linear feet of completed floodwall, as measured by the Contracting Officer. The floodwall will be measured horizontally at the vertical centerline of the floodwall between the point of beginning and point of end of the floodwall, as shown on the contract drawings. Measurement will be made to the nearest 0.1 foot.

1.2.34.3 Unit of Measure

Unit of measure: Linear Feet (LF).

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (Not Applicable)

-- End of Section --

nominal size coarse aggregate shall be 3/4 inch, in accordance with ACI 318/318R. The air content shall be between 4 and 7 percent. The slump shall be between 2 and 5 inches. The maximum water cement ratio shall be 0.45.

1.3.2.1 Pre-Cast Alternative

The pre-cast panels shall have the same concrete mixture proportions as the cast-in-place concrete listed in the paragraph above.

1.3.3 Pre-cast Alternative Panel Lifting Design

The pre-cast concrete Manufacturer shall be responsible for the design of inserts necessary to lift and handle the pre-cast concrete panels. Inserts shall be hidden from view upon installation of the panels and caps.

PART 2 PRODUCTS

2.1 PRCAST ALTERNATIVE

All aspects of this specification hold for the precast units excpet as noted. The contractor has the option of casting the precast panel tops and the precast pilaster tops on site. The precast wall panels shall be cast at a precast plant.

2.1.1 Precast Manufacturer's Qualifications

The precast concrete panels must be fabricated by an experienced and acceptable precast concrete manufacturer certified under the PCI Plant Certification Program or NPCA Plant Certification. The manufacturer needs to have been regularly and continuously engaged in the manufacture of precast concrete work similar to that indicated on the drawings for at least 3 years.

2.1.2 Standards

Precast panels shall conform to ACI 318/318R and PCI MNL-117.

2.2 MATERIALS

2.2.1 Cementitious Materials

Cementitious materials shall conform to the appropriate specifications listed:

2.2.1.1 Portland Cement

ASTM C 150, Type I or II.

2.2.1.2 Pozzolan

Pozzolan shall conform to ASTM C 618, Class F.

2.2.2 Aggregates

Aggregates shall meet the quality and grading requirements of ASTM C 33 Class Designations 4M or better.

1.4.2 Handling

Materials shall be handled in a manner that ensures delivery to the trench in sound, undamaged condition. Pipe shall be carried to the trench, not dragged.

PART 2 PRODUCTS

2.1 PIPE FOR STORM SEWER AND CULVERTS

Pipe for storm sewer and culverts shall be the sizes indicated and shall conform to the requirements for the following pertinent types:

Reinforced concrete pipe shall be the sizes and class indicated on the contract drawings and shall conform to ASTM C 76, class as indicated on the drawings. The pipe manufacturer shall certify that the pipe meets the testing requirements of ASTM C 443 and ASTM C 76.

2.2 DRAINAGE STRUCTURES

Gatewell inlet and outlet structures and headwalls shall be constructed as indicated and in accordance with Section 03 30 00 CONCRETE.

Precast concrete flared end sections shall be of a standard design in accordance with ASTM C 76 and ASTM C 443, Class IV. Steel trash racks shall be provided for concrete end sections where indicated. Trash racks shall be in accordance with Section 05 50 00 MISCELLANEOUS METAL.

2.3 MATERIALS FOR DRAINAGE STRUCTURES

2.3.1 Concrete

Concrete used for Gatewell structures shall conform to the requirements outlined in Section 03 30 00 CONCRETE.

2.3.2 Mortar

Mortar for pipe and connections to other drainage structures shall conform to ASTM C 270, Type M, except the maximum placement time shall be 1 hour. The quantity of water in the mixture shall be sufficient to produce a stiff workable mortar. Water shall be clean and free of harmful acids, alkalis, and organic impurities. The mortar shall be used within 30 minutes after the ingredients are mixed with water.

2.3.3 Flowable Fill

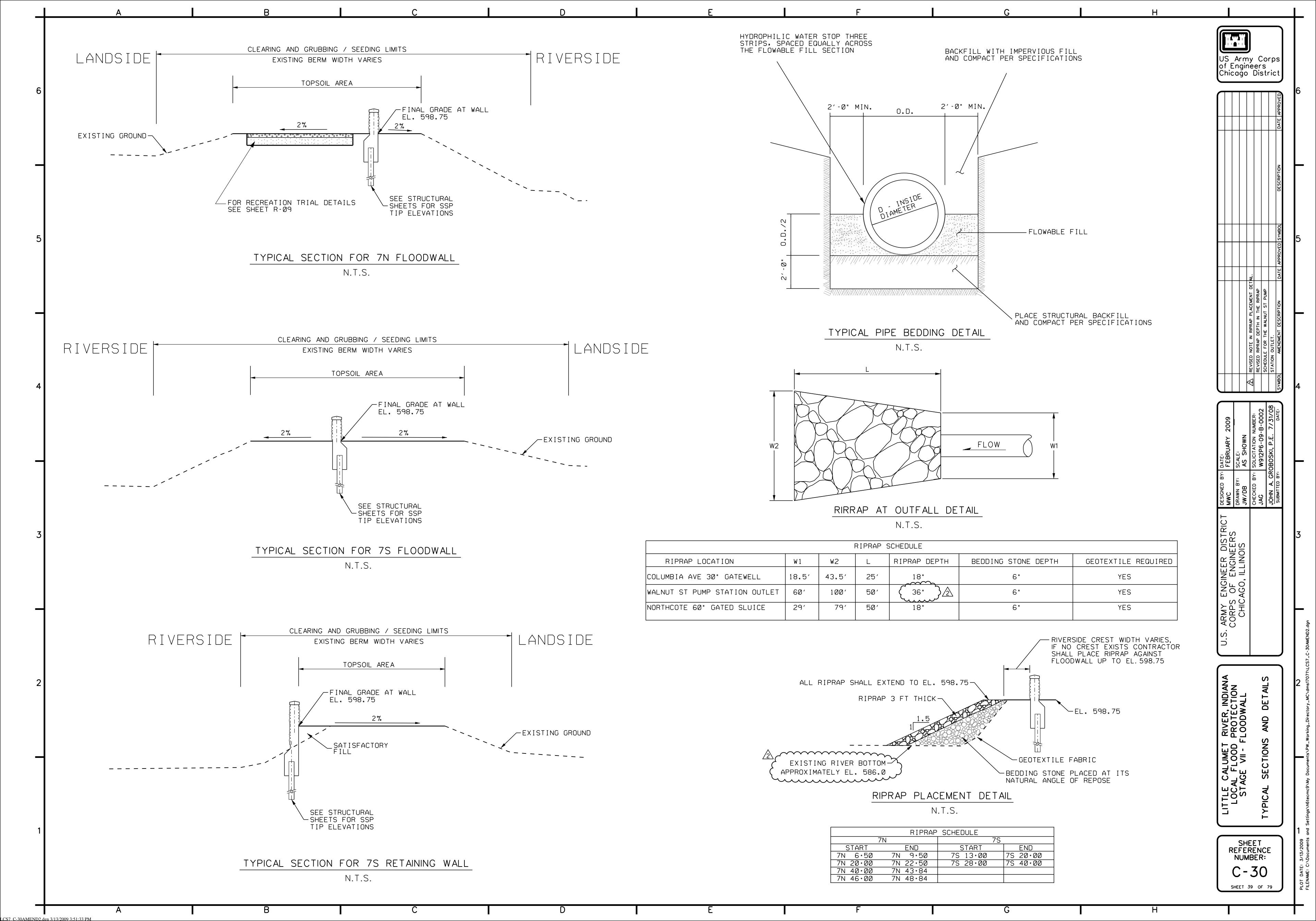
Flowable fill shall be high slump concrete conforming to the mix required in Section 03 30 00 CONCRETE with the exception that the maximum allowable slump shall be (9) inches.

2.3.4 Precast Reinforced Concrete Manholes and Catch Basins

Precast reinforced concrete manholes and catch basins shall conform to INDOT. See INDOT Standard Drawings E 720-MHST-02, E 720-MHST-05 and E 720-CBST-08. Joints between precast concrete sections shall be watertight.

2.3.5 Frame and Cover

Frame and cover shall conform to INDOT. See INDOT Standard Drawing E



PRE-BID Stage VII 1000 a.m.

ATTENDANCE ROSTER

Name of Meeting:		Date: 3-3-0	9
NAME (please print)	Organization and/or Address	Phone	Email
1 FRED SCHMEDNECH	SSINC GARY IN	219	
2 DENNIS R. HAUTER	AVAN PRECAST	708-757-6290	dennis Da avaapcion
3 DOB SCHILLER	CALLANDIE & NSSE.	815.254	KBUCINGER &
4 DAV CLORE	11 11 1)		CMCAVOIESCON
5 ORAIG BRADLOY	ILLINOIS CONSTRUCTORS	630 232 728V	craightadley &
6 Michael Nelson	Naperville Excavating	630-355 1400	Mne Ison Onaperexe
7 DAVID HARDIESTY	NAPIERVILLE IERC.	630 -355	COM
8 Tony Foote		513-326 6000	+foote@ sunesisco.com
9 Rich Pomronke	GARNER SERVICES LLL	504 616-6083	CHRNER SVC. COM
10 Mike Kelly	Clean Lot Tree Suc	147 765 agos	Kelly & cotreal
11 Pat clarke	Albin (4-1501 \$ 60	630-785-	Pelarke@albin (4r/son, com
12 Mike Dales	Albin Carlson	4000	mdoles e albincarkon.com
13 Grea Furman	Dyer Const. Co.IN	219-865	germana dyer construction
14 JON SHANER	Dy ER CONSTRUCTION	219 865-	Shaner@ dyerconstruction
15 JOHN DUDLICEK	GRIMMER CONST.	924-1623	dudlicero
16 Tom Schafer	That les Found time land	219 949-2084	tschafere thatcher tanditus
17 Scott MCCocnick	Homer Treeservice	847-	Jay Q Homanay
18 PATRICIC STANFORD	BOWEN ENFINECTING	219-661-	Pat SO Bowen
19 GARY MOON	BOWEN ENGINEERING	317-842-	engineering com enous D Burnengineering co
20 MARE ANOWA	WALSH CONSTRUCTION	219.324-	MAROWAR CU
21 SUDHIR MANTRI	INDUSTRAM A ENV SERV	219-939-	smantrie iesolution com
22 Dennis Browne	HATWARD BAKER	630 4301	1 broune @
23 Doug MAJACKOWSKI	G.E. MARSHALL INC	219 462:3415	dogno GEMALSHALL COM
24 BRENT BYFORD	HAYWARD BAKER	630-339-	bm by forde
1 /4/		4312	- haywardbaker. en - wysockey@
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26 Duane Deallow, Jr.	wargaret the	5811	. Gom

PREBIS StageVII 10:00 a.m.

ATTENDANCE ROSTER

Name	of Meeting:	Date:		
	NAME (please print)	Organization and/or Address	Phone	Email
- 1	Gaz. Ha. Danse	RAINCEL CONTE	708-865	sheldemana@
	STAN HEIDEMANN	RAUSCH CONST. Co	20	Vauchconstruction can
2	Ion Harria	RAUSCH CONST. CO.	708.865.	thannal .
3	Dave Slive	Kenny Const	773-447	delinare Kennyconstruction.«
		1 21	3501	Micsek@Kenny
4	Mike Jasek	T . Tara & Lauren and warmer	42.6.022	constructionion
5	RALPH MORA	INDUSTRIAL & ENVIRONMENTE STRUCES, LLC	219-937-100	rgmora@icrobulton
6	JAMES FAETANINI	LANDMARK ENGINEERING GROUP	309 755	LANGGROUP, BIZ
7	Santanoo Sen	queat lakes Soil	(630)675	ssen @ greatlakessoil;
8	MATT O'KRAY	L. B. FOSTER	630-954-	MUKRAY O USTOSPECO, UM
9	feline Sail	CT-USACE	312-846-	ragino.g. blaile usallarmy.mi/
10	JIM POKRAJAC	LCRBDC	219-763-0696	JPOKRA JACENIR PC.ORF
11	Eric SAMPSON	COE	312-846-546	
12	Matt Cunningham	COE	312 846-5416	
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